

BALCONY SOLAR AND STORAGE
SUN-BK(80-250)-5.12KWH-EU-AM2-18L-32L

Balcony solar system · 0.8 – 2.5 kW · 7 models


0.8 – 2.5 kW

RATED POWER

5.12 kWh

ENERGY CAPACITY

51.2 V

NOMINAL VOLTAGE

IP65

PROTECTION CLASS

Parameter	Unit	SUN-BK80-5.12KWH-EU-AM2-18L	SUN-BK100-5.12KWH-EU-AM2-18L	SUN-BK80-5.12KWH-EU-AM2-32L	SUN-BK100-5.12KWH-EU-AM2-32L	SUN-BK160-5.12KWH-EU-AM2-32L	SUN-BK200-5.12KWH-EU-AM2-32L	SUN-BK250-5.12KWH-EU-AM2-32L
PV input								
Max. PV input power	W	2200		4400				
Rated PV input voltage	V	42.5						
MPPT voltage range	V	20 – 55						
Start-up voltage	V	25						
Max. input current per MPPT	A	18		32				
Max. short-circuit current per MPPT	A	27		48				
Number of MPPT trackers		2						
PV strings per MPPT		2						
AC output								
Rated output power	W	800	1000	800	1000	1600	2000	2500
Max. AC input/output active power	W	880	1100	880	1100	1760	2200	2750
Rated AC voltage	V	230						
Rated AC output current	A	3.5	4.4	3.5	4.4	7	8.7	10.9
Phase		Single-phase						
Rated AC frequency	Hz	50/60						
Max. AC output current	A	3.9	4.8	3.9	4.8	7.7	9.6	12
Power factor		0.8 leading - 0.8 lagging						
Backup output power	W	–		2500				
Max. off-grid apparent power	VA	800	1000	–				
Peak power (off-grid)		2 x rated power, 10 s						
On-grid/off-grid switchover time		<=4 ms						
Max. parallel units		3						

Parameter	Unit	SUN-BK80- 5.12KWH-EU- AM2-18L	SUN-BK100- 5.12KWH-EU- AM2-18L	SUN-BK80- 5.12KWH-EU- AM2-32L	SUN-BK100- 5.12KWH-EU- AM2-32L	SUN-BK160- 5.12KWH-EU- AM2-32L	SUN-BK200- 5.12KWH-EU- AM2-32L	SUN-BK250- 5.12KWH-EU- AM2-32L
Max. rated output power when paralleled	W	2400	3000	7500				
Max. continuous AC pass-through (grid to load)	A	30						
DC injection current		<0.5% In						
Battery								
Battery type		LiFePO4						
Battery voltage range	V	44.8 – 57.6						
Max. charge current	A	50						
Max. discharge current	A	50						
Charging strategy for Li-ion battery		Self-adaption to BMS						
Nominal energy capacity	Wh	5120						
Nominal voltage	V	51.2						
Operating voltage range	V	44.8 – 57.6						
Cell type		LiFePO4						
Cycle life	cycles	≥6000						
Max. expandable energy	Wh	81920						
Max. battery modules stacked	pcs	3						
Max. battery modules in parallel	pcs	16						
Efficiency								
Max. efficiency	%	96.5						
European efficiency	%	96						
MPPT efficiency	%	>99						
Protection								
Protection functions		DC reverse polarity protection; AC output overcurrent protection; AC output overvoltage protection; AC output short-circuit protection; thermal protection; insulation impedance detection; anti-islanding protection						
Surge protection level		Type II (DC); Type II (AC)						
General data								
Dimensions (W x H x D)	mm	526 × 510 × 210						
Battery module dimensions (W x H x D)	mm	450 × 420 × 210						
Battery module weight	kg	40±3						
Ingress protection (IP rating)		IP65						
Operating temperature range	°C	–10 – 55						
Operating temperature range with optional heating	°C	–20 – 55						
Derating above	°C	45						
Relative humidity	%	0 – 95						
Max. operating altitude	m	2000						

Parameter	Unit	SUN-BK80-5.12KWH-EU-AM2-18L	SUN-BK100-5.12KWH-EU-AM2-18L	SUN-BK80-5.12KWH-EU-AM2-32L	SUN-BK100-5.12KWH-EU-AM2-32L	SUN-BK160-5.12KWH-EU-AM2-32L	SUN-BK200-5.12KWH-EU-AM2-32L	SUN-BK250-5.12KWH-EU-AM2-32L
Installation		Floor-mounted, stacked-mounted						
Warranty	years	10						
Communication								
Communication interfaces		Wi-Fi; Bluetooth; LoRa						
Display		LED (SOC, alarm)						
Monitoring		Cloud app (remote monitoring and control); local Bluetooth (offline control)						
Battery module communication interface		LoRa						
Optional interfaces		Parallel communication port and load port; RS485 port; CT port (must be selected at order, not field-upgradable)						
Optional accessory		Wireless CT (SUN-SMART-CT02-L) for wireless zero-export control						
Certifications								
Certifications and standards		IEC 62619; UN38.3; IEC/EN 62109-1; IEC/EN 62109-2; IEC/EN 61000-6-1/2/3/4						
Battery module certification		UN38.3; IEC 62619; CE						
Grid codes		VDE 4105; IEC 61727/62116; VDE 0126; AS 4777.2; CEI 0-21; EN 50549-1; G98; C10-11; UNE 217002						

Specifications are subject to change without notice. Values are typical at 25 °C unless stated.

XUSION is a brand of Hunan New Lithium Aviation Technology Co., Ltd.

E-mail lidreamtec@163.com

WhatsApp +86 133 5280 0772